



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor


Kathleen Clarke  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

January 17, 2002

TO: Internal File

FROM: David W. Darby, Sr. Reclamation Specialist 

RE: Technical Field Visit, Reclamation Work Phase II Bond Release, UtahAmerican Energy, Inc., Horse Canyon Mine, C/007/013

**Other Attendees:** Karl Houskeeper, Reclamation Specialist, DOGM  
Jay Marshall, Project Manager, UtahAmerican Energy, Inc.

**Date & Time:** December 21, 2001, 10:00 am to 1:30 pm

**PURPOSE:**

The purpose of the field visit was to evaluate the reclamation work UEI conducted on the channel adjacent to the Refuse Pile and #1 Sedimentation Pond, reclaimed for Phase II Bond release. Reclamation work had been begun on the channel on November 21, 2001 and on the sedimentation pond on November 23, 2001.

In a letter dated November 10, 1999, UEI was granted conditional approval for Phase II bond release. The Division found that the permittee had met all the requirements for Phase II including vegetation and water quality standards. Approval was conditioned upon the removal, regrading, and the revegetation of the Refuse Pile culvert and #1 Sedimentation Pond.

Some areas and structures at the mine site are excluded from the bond release process in the event that a new operation could utilize the facilities. The buildings, pad and portal structure (sealed) remain intact. Runoff from these sites flow to #2 Sedimentation Pond. There are also a ventilation fan, water tank and powder magazines that have not been reclaimed. Runoff from these sites is controlled by alternate sediment control structures (ASCA's).

TECHNICAL FIELD VISIT

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**OBSERVATIONS:**

Refuse Pile Channel

Karl and I met Jay at the UEI office in Price, Utah, and then drove out to the Horse Canyon mine site. We hiked down to the reclaimed channel. It had snowed the day before and the snow was about 4-inches deep. The culvert had been removed and a new channel installed that curves down stream more than the culvert section had. The channel was reshaped to allow flow from the reclaimed refuse pile to enter the channel. The channel had been bermed along the sides to hold runoff back. The majority of the berms were eliminated. The channel was riprapped in the bottom. The areas along the upper edges of the channel were gouged to help retain runoff while vegetation gets started. Seeding had been done by hand. A silt fence ran lengthwise along the upper embankment of the channel.

During the evaluation, I noticed there was about a two-foot drop from the contact point of the rebuilt channel with Horse Canyon Creek. The drop is sudden and occurs in soft soil type material, and not protected by riprap. The contact between channels should be gradual; otherwise, it establishes a nickpoint where headcutting can begin.

The permittee will be required to reshape and riprap the channel contact area.

#2 Sedimentation Pond

The reclamation work at the #2 Sedimentation Pond had removed most signs of the pond. The embankments were reshaped to conform to the surrounding slopes. Soils from the embankments were moved into the edges of the pond that reduced the outer embankment and created a ravine that combined the grade from the runoff channel to the old discharge channel. The gradient is low and erosion should be minimal. Silt fences were installed along the new flow path to contain any sediment while vegetation gets established. The site was gouged with a trackhoe and was reseeded by hand, with a seed mixture designated in the Mining and Reclamation Plan.

An evaluation of the site identified a few stands of rebar sticking out of the ground. The rebar will have to be removed. Snow on the ground prevented a thorough check to see how deep the concrete was buried.

The permittee will be required to remove the rebar.

**RECOMMENDATIONS/CONCLUSIONS:**

Prior to approving Phase II bond release the permittee will be required to regrade and riprap the lower channel (adjacent to the Refuse Pile) at the contact area with Horse Canyon Creek. The permittee will also be required to remove the rebar sticking out of the ground at the #2 Sedimentation Pond. During removal of the rebar, permittee should ensure all concrete is buried to allow root growth, assuring maximum vegetation cover.

cc: All Attendees  
Price Field Office  
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